

EPRI DISCUSSION OF EXTENDED STORAGE:

- Current storage licensing basis extends to a maximum of 120 years
 - Up to 60 years in pool storage (very rare for spent fuel to be stored for that long due to lack of pool space)
 - Some dry storage systems licensed for up to 60 years of operation
- The technical and licensing bases for dry storage beyond 60 years has not been established – yet
 - Likely to have longer, perhaps significantly longer lifetimes than 60 years, but work needs to be done to demonstrate that
- “Eventually” the confidence in the existing dry storage systems to maintain their safety functions will begin to erode.
 - When is “eventually”?
 - If the spent fuel must be repackaged, this involves both financial cost and increased worker dose
 - Use risk assessments to evaluate the trade-offs between continuing to use the existing systems and repackaging
- EPRI has formed an “Extended Storage Collaboration Program”
 - Current members: EPRI, DOE-NE, DOE-EM, NRC-SFST, NRC-RES, NWTRB, US utilities and cask vendors, growing international participation
 - Phase 1: review current technical bases for storage licenses and conduct gap analyses
 - Phase 2: conduct field studies, experiments, and additional analyses to address gaps
 - Phase 3: high burnup (>45 GWd/MTU) spent fuel dry storage demonstration